

## CLAIMS

1. A false-color reducing device comprising:

a raw data reading processor that reads a raw data, in which a first row and a second row are arranged alternately in a vertical direction, said first row being formed by  
5 arranging a first pixel representing red (R) data and a second pixel representing green (G) data alternately in a horizontal direction, said second row being formed by arranging said second pixel and a third pixel representing blue (B) data  
10 alternately in the horizontal direction;

a first interpolation processor that performs an interpolation on said raw data to generate R plane data in which all the pixels have said R data, G plane data in which all the pixels have said G data, and B plane data in which  
15 all the pixels have said B data;

a color difference data calculation processor that calculates U data and V data, which are color difference data, regarding said first, second, and third pixels, using said R plane data, said G plane data, and said B plane data;

20 a second interpolation processor that calculates a mean value of said V data of four pixels adjacent to said first pixel in oblique directions, and sets this mean value as replacement V data for said first pixel; and

25 a third interpolation processor that calculates a mean value of said U data of four pixels adjacent to said third

pixel in oblique directions, sets this mean value as replacement U data for said third pixel.

2. A false-color reducing device according to claim 1, further comprising a fourth interpolation processor that  
5 calculates mean values of said V data and said U data of four pixels adjacent to the upper, lower, right, and left sides of said second pixel, and sets these mean values as replacement U data and V data for said second pixel.

3. A false-color reducing device according to claim 2,  
10 wherein said fourth interpolation processor performs an interpolation, using said V data and U data obtained by said second and third interpolation processors.